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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,970	01/05/2007	Andreas Prinz	PRINZ ET AL-4 PCT	8540
25889	7590	04/20/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER PASCHALL, MARK H	
			ART UNIT	PAPER NUMBER
			3742	
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			04/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,970	Applicant(s) PRINZ ET AL.	
	Examiner Mark H. Paschall	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starva 5,117,088 in view of Stone et al 3,376,470.

The claimed subject mater, inclusive of amendments, is obvious for the same reasons set forth in paragraph 5, page 3, in the previous office action mailed on 3-18-2008.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lisser 2,891,196 in view of Starva, as set forth above. . The claims are unpatentable over Lisser for the same reasons set forth in paragraph 6, pages 3-4 in the prior office action of 3-18-2008. The claims have been amended to reflect use of packet format and the patent to Starva is applied, as described above, for clearly teaching use of packet format as efficient and enhancing the energy content of the pulses applied, with the energy applied by the pulses obviously minimized by such use, dependent on the make-up of such pulses, obvious for the artisan. In view of such teaching it would have been obvious to modify the Lisser system to use packet distribution for enhanced efficiency, well within the level of ordinary skill in the art.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lisser in view of Starva, as applied to claims 8-10 above, and further in view of Stone et al.

Lisser as modified teaches the claimed subject matter except for showing use of connection of the welding current after ignition is effected. Such connection is both obvious and common to welding systems, since ignition has to occur first in a welding process. In addition the patent to Stone et al teaches the same as conventional and in view of this teaching it would have been obvious to modify the Starva patent further to include the same, such modification being obvious to one of ordinary skill in welding control.

Response to Arguments

Applicant's arguments filed 6-4-2008 have been fully considered but they are not persuasive. Figures 3,5 in Starva clearly teach use of packets of Vs pulses for striking or ignition purposes, in combination with the welding voltage used after striking. Claim 1 has been amended to set forth a result that overall energy during ignition can be minimized even while having maximum energy in each ignition pulse. Since the claims are silent as to the amount of energy to be minimized and the maximum energy expenditure, the variable frequency and variable amplitude pulses in the packets in Starva teach this claimed configuration result, as broadly defined.

Applicant's remarks on page 10 in the remarks advance that safety risk can be minimized by use of packet format. Column 8 lines 58-59 in Starva also mention that, "This frequency is high enough to prevent any injury by inadvertent contact with the electrode", clearly teaching the advantage recognized by Applicant. It is obvious and inherent that the overall energy, as claimed, is also minimized while allowing proper, or maximum energy for ignition.

Page 11 in the remarks argues that the instant claimed invention defines several pulse packets having successive pulses within each packet. Clearly figures 3 and 5 in Starva teach the same as conventional.

With respect to claims 8-10, Lisser clearly teaches the claimed pulse format and in view of the Stave's I teaching it would have been obvious and well with the level of

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ordinary skill in welding control to modify Lisser to use pulse packet format to enhance the safety of the device. With respect to new claims 12 and 13, and claims 3-7 defining particular parameters such as duration and period for the pulses and packets, one of ordinary skill in welding control would find such choices obvious and routine, dependent on the undisclosed parameters of the welding head, workpiece and the level of safety desired, noting that such parameters are variable in the Starva patent.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H. Paschall whose telephone number is 571 272-4784. The examiner can normally be reached on 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark H Paschall
Primary Examiner
Art Unit 3742

Mhp

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